Spec. XXXXX

PART F - DETAILED SPECIFICATIONS

DIVISION F2 - DETAILED REQUIREMENTS

- 1. <u>General</u>: The scope of this contract includes the design, procurement, fabrication, delivery, installation and start-up of modifications to the Intermountain Generating Station (IGS) Units 1 & 2 Steam Generators.
 - a. These contract modifications shall provide for a continuous boiler rating of 6,900,000 lbs/hr output at 1005°F superheat and 1005°F reheat temperature under normal operating conditions. These modifications shall also include an overfire air system capable of providing a reduction in NOx emissions of 15% and consistent NOx emissions of less than 0.40 lbs/MMBTU under all operating modes. See Performance Guarantees, Section 11.
 - b. Within the design phase of the work, the Contractor shall review all operational impacts on associated equipment and systems such as fans, burners and dampers. Any concerns regarding operating limitations or increase power demands noted within the modeling/design phase shall immediately be brought to the attention of the Contract Administrator.
 - c. A primary focus of this contract shall be the optimization of the work to occur during Unit offline hours. Detailed planning of the contract work scope shall include a level of redundancy in materials, equipment and manpower to ensure that guaranteed schedules are achieved.
- 2. <u>Project Scope:</u> The successful bidder shall provide and complete the following work:
 - a. Boiler Model:

The Contractor shall prepare and utilize a representative Boiler Model to determine the proper design, arrangements, operating guidance and operational impact associated with the boiler modifications within this contract. Among the operational impacts evaluated shall be:

- Superheat Temperature & Pressure
- Reheat Temperature
- Furnace Exit Gas Temperature
- Economizer Exit Gas Temperature
- Generation of Oxides of Nitrogen
- Furnace Heat Absorption and Cleanliness
- Superheat & Reheat Attemperator Sprays
- Carbon Monoxide Generation
- Burner Metal Temperatures both In-service & Out-of -service

A complete set of model inputs and results of the various model runs shall be provided to the Owner as part of the Owners design review of this project.